98. Collaboration between the unified Modelling System and the standardized Modelling System, second stage

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Probabilidad Imposible: Collaboration between the unified Modelling System and the standardized Modelling System, second stage

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The Unified Modelling System is the first step in the third stage of the fourth phase, the Unified Application. In turn, the Modelling System is subdivided into three inner stages, the first is the conceptual scheme, the second is distributed in: logical analysis of conceptual sets, conceptual models, and conceptual maps; and the third is the decision-making process.

In the same way but working by Deduction, the standardised Modelling System is the first step within the third stage of the third phase, the standardised Global Artificial Intelligence. In turn, the standardised Modelling System works through three inner stages, the first one is the database of rational hypothesis, the second one the models of the rational hypothesis, and the third one the decision-making process.

In the last post, I analysed how the collaboration between the standardised Global Artificial Intelligence and the Unified Application could work in the first stage of the unified Modelling System and the standardised Global Artificial Intelligence, introducing an important concept, the simultaneous reading.

The simultaneous reading in the first stage of the unified Modelling System and the first stage of the standardized Global Artificial Intelligence would be part of the categorical/factual collaboration, understanding for categorical/factual collaboration that process which will allow both systems, the unified Modelling System and the standardized Modelling System, to borrow each other interchangeable categories or factors.

The categorical/factual collaboration within the simultaneous reading could work given the possibility that, in the first stage and the second stage of the unified Modelling System and standardized Modelling System, both systems could reach each other their outputs, giving them the possibility to share information and share every possible update in their schemes and databases, so both schemes and databases could read each other, borrowing those aspects not included yet in their respective first stage of application.

If as soon a rational hypothesis by Deduction is included in the database of rational hypothesis, passing the first rational check, or as soon any rational hypothesis is modified or deleted from the database of rational hypothesis, an specific or the global application in the Unified Application, could have access to the database of rational hypothesis reading any update in the database of rational hypothesis, this simultaneous reading from the specific or global application on that update on the database of rational hypothesis once the update is settled on the database of rational hypothesis, could bring the opportunity to the first stage of the unified Modelling System to analyse the information on that rational hypothesis, to read the rational hypothesis and possible events predicted by that rational hypothesis, in order to categorize every possible event comprehended in that rational hypothesis, what in the end is a attributional process matching categories to possible events according to rational hypothesis, in order to include this categorical attributions, as any other attribution made in the second stage of the Unified Application, within the conceptual scheme, in order to be represented in the dynamic model in the second stage of the Unified Modelling System.

It is in this simultaneous reading where it could be possible that specific applications working in the Unified Application, or the global application itself within the Unified Application, reading/categorizing any event predicted by any rational hypothesis made by Deduction, all possible event according to the expected data given a rational hypothesis, could be categorized and included in a categorical dynamic model.

This means that the simultaneous reading is in fact a second way of categorical attributions, so it could be possible to distinguish at least two different ways to make categorical attributions: real categorical attributions made in the second stage by Application, and rational categorical attributions made as a consequence of the simultaneous reading in first and second stage of the unified Modelling System reading the outcomes and any update in first and second stage of the standardized Modelling System. In brief, both ways to make categorical attributions could be synthesised as follows:

- Real categorical attributions, made in the second stage of any intelligence by Application or specific or particular application working by Application, given a sample of data and given an application as a conceptual database of categories, the attribution of what category within the database corresponds to this sample of data, attributing the right category to the sample, distinguishing three subtypes of attributions: full attribution (the empirical value of the sample is equal to or greater than a critical reason), new attribution (there is no category within the database to be matched with the sample, so

the sample becomes a new category to be added in the database. New attributions are more frequent in Heuristic Artificial Research by Application, and some Mixed Artificial Research by Application), utilitarian attribution (not matching rationally any category with the sample, the empirical value of the sample is not enough for a rational attribution to any category, them the category with the highest level of similarity even not reaching the matching point, becomes the utilitarian category for this sample, although accepting a wider margin of error beyond the critical reason. Utilitarian attributions are more likely in Productive Artificial Research by Application, and some Mixed Artificial Research by Application.

- Rational categorical attributions, made in the first stage and second stage of the unified Modelling System using the simultaneous reading, when an intelligence by Application, or a specific or particular application, reads any outcome or any update in the database of rational hypothesis as first stage of the deductive Modelling System or the deductive models as second stage of the deductive Modelling System, simultaneously that intelligence by Application, or specific or particular application, categorizes every phenomenon comprehended in that rational hypothesis, synthesising the expected data according to that rational hypothesis and the categories within the conceptual database of categories as first stage by Application and/or the categories within the conceptual scheme, matching the expected data coming up from the hypothesis with the right category, identifying for every single phenomenon in the curve drawn by the rational hypothesis, what categories define every phenomenon, as a rational categorical attribution to be included in the conceptual scheme, to be included in the conceptual model, to be included in the conceptual map. Experimentation in rational categorical attributions should give the opportunity to study the possibility of replicating in rational categorical attributions the same three subtypes of attributions, alike in real categorical attributions, distinguishing as well within rational categorical attributions between: full attributions, new attributions, and utilitarian attributions.

If this last option works, in that case, the classification of categorical attributions will end up comprehending at last the following types of categorical attributions:

- Full real categorical attributions

- New real categorical attributions

- Utilitarian real categorical attributions

- Full rational categorical attributions

- New rational categorical attributions

- Utilitarian rational categorical attributions

Within all these types of attributions, combining the two ways to make categorical attributions: real categorical attributions in the second stage by Application, rational categorical attributions through the simultaneous reading; and the three subtypes of attributions: full attributions, new attributions, utilitarian attributions; the categorical attribution which will make possible the transformation of rational hypothesis or factors into categories, as part of the categorical/factual collaboration is the new rational categorical attributions.

If it is possible in rational categorical attributions as a result of the simultaneous reading the creation of new categories to be included in the conceptual database of categories, as first stage by Application, and the conceptual scheme, as first stage in the unified Application, this possibility what will make possible is the transformation of rational hypothesis into categories to be included in the database of categories and the conceptual scheme, or the transformation of factors into categories to be included into the database of categories or the conceptual scheme, making possible the categorical/factual collaboration through the simultaneous reading.

In the same way but in the opposite direction, if an intelligence by Application, or a specific or a particular application, can read any outcome or update made by Deduction, to read/categorize these outcomes/updates, rational hypothesis, by Deduction into categories within the Application, in that case it is possible that any outcome or update made by Application could be simultaneously read and rationalized by Deduction.

But in this simultaneous reading, not only by Deduction is possible to read any possible outcome or update made by Application, but even the possibility to make a rational analysis by Deduction about the behaviour throughout the conceptual scheme, the

conceptual/map models, or the behaviour of the database of categories, analysing what rational equations are behind the behaviour of the first stage by Application and the first and second stage of the categorical Modelling System. Given these two different ways to make the simultaneous reading from by Deduction to by Application, I will summarise both of them, calling them respectively rational simultaneous reading of outer categorical data and rational simultaneous reading of inner categorical data.

- Rational simultaneous reading of outer categorical data, when an intelligence by Deduction, or a specific or particular program, reads any outcome or update made by Application, finding out the pure reason (equation) behind this finding. For instance, if by Application it would be possible to detect a series of earthquakes, given a series of samples of data, for instance, the detection of earthquakes in Japan, California, Chile, by Deduction the possibility to analyse the equation behind these phenomena, analysing all samples of data and matching pure reasons to data. In this process, if by Deduction is reading any outcome or update made by the Application, if the Application makes any new attribution, sooner or later this new attribution when is found by Deduction using simultaneous reading, the new attribution could become a new rational hypothesis or factor, if the factor behind the new attribution does not exist yet in the matrix, or the new attribution is synthesisable as a new rational hypothesis to be added to the database of rational hypothesis. This idea, the possibility to transform new attributions into new factors and/or new rational hypothesis through the rational simultaneous reading of any outcome and/or update made by the Application, is an idea that will demand further experimentation, because it could make easier the categorical/factual collaboration, transforming categories into factors or rational hypothesis.

- Rational simultaneous reading of inner categorical data, means the possibility of studying the database of categories as first stage by Application as an object itself, analysing the behaviour of every change in the database as a phenomenon able to be comprehended within a rational equation, so that the way in which the database of categories changes, could be defined by a rational equation, so it could be predicted the behaviour of the database of categories itself, in the same way that it would be possible the rational analysis of how the conceptual scheme, or the conceptual model and the conceptual map, changes all the time, transforming the changes in the inner organization of an intelligence, or a specific or particular application, as a object to study analysing how it changes, so that it could be possible to make a mathematical inner model of how internally the intelligence, or the application itself changes over time, and the explanation of the whole intelligence as an artificial psychology. Due to this possibility, when constructing the particular matrix of particular programs, or particular programs for particular applications, or constructing the matrix of the integrated Global Artificial

Intelligence, not only it is necessary to distinguish between two hemispheres: categorical and factual; for every hemisphere it is necessary to distinguish two sections: natural/social phenomena, and technological phenomena.

In the end, the distinction between rational simultaneous reading of outer categorical data, and rational simultaneous reading of inner categorical data, sets up the possibility of:

- Through rational simultaneous reading of outer categorical data, the transformation of categories into factors and/or rational hypotheses to be included in the natural/social section of the factual hemisphere of the matrix and/or the database of rational hypotheses to be modelled.

- Through rational simultaneous reading of inner categorical data, finding out the pure reason behind the behaviour of the database of categories itself, the conceptual scheme itself, the conceptual model itself, the conceptual map itself, the transformation of these findings into factors and/or rational hypothesis to be included within the technological section of the factual hemisphere of the matrix, and/or the database of rational hypothesis to be modelled.

The distinction between two sections: social/natural, technological; in both hemisphere of the matrix, and the possibility of simultaneous reading of both sections between these two hemispheres, creating inner categorical and rational models of the inner organization of the intelligence, at the end will work as an artificial meta-cognition with a massive potential for the Learning System and the Artificial Engineering.

Having in mind that at the end as a result, by the time it is possible the design of particular programs for particular applications, or particular applications for particular program, and finally the design of the integrated Global Artificial Intelligence, by that time it would be possible to develop four different models, the categorical and rational models of the real world as a representations of the real world, but one as categorical representation of the real world, while the other one as rational representation of the real world, and the categorical and rational models of the inner organization of the whole intelligence, the categorical representation of the artificial psychology, and the rational representation of the artificial psychology, what in this post I will develop only being still focused in third and fourth phases, not moving on to the sixth phase yet, is how the collaboration between

the unified Modelling System and the standardized Modelling System works in their respective second stage.

In the collaboration in the second stage, between the unified and standardised Modelling System will be based on the categorical/factual collaboration throughout the simultaneous reading, and the decision collaboration.

The way in which the categorical/factual collaboration using simultaneous reading is going to be synthesised to the decision collaboration, in the second stage of the unified Modelling System and the standardized Modelling System, is through what I will call the third proposal.

Till now, what I have called the first proposal and the second proposal are the proposals for the design of the second sub-stage within the second stage in the Unified Modelling System. Understanding the unified Modelling System as first step within the third stage of the Unified Application, the unified Modelling System is organized as well in three stages, the first one is the conceptual scheme, but the second one is distributed in three sub-stages: the logical analysis of conceptual sets, the modelling, the mapping; and the third stage in the unified Modelling System is the decision making process.

For the second sub-stage within the second stage of the unified Modelling System, till now I had proposed two different proposals, the first proposal explained in the post “Specific categorical Modelling System, second stage”, proposing static models as second sub-stage within the second stage of the specific Modelling System, and the second proposal was explained in the post “Unified categorical Modelling System, second stage”, and more developed in the following post “Unified categorical Modelling System, third stage”.

The first proposal for categorical models in Specific Artificial Intelligences for Artificial Research by Application is basically: once the real object has been placed in the right place in the conceptual scheme passing the second categorical check in the first stage of the specific categorical Modelling System, and having been made the analysis of conceptual sets in which the real object could be placed as first sub-stage within the second stage of the specific categorical Modelling System, then the second sub-stage within the second stage of the specific categorical Modelling System consists of: the drawing a model in scale of the real object labelling within the model all the categories

previously analysed; to settle the model on the conceptual map, as third sub-stage within the second stage of the specific categorical Modelling System, in order to make decisions, according to categories, dimensions, location, as third stage of the specific categorical Modelling System, decision making process as a result to match set of decisions to sets of vectors/categories and according to the position on the map.

The second proposal was made when analysing the unified categorical Modelling System, the distribution of stages was settled in this way, first stage is the unified conceptual scheme, the first sub-stage of the second stage is still the logical analysis of conceptual sets, but now having in mind all possible vectors, but differentiating between vectors according to, conceptual/logical or only quality vectors, weight and information, if they are internal or external vectors, analysis whose result will be used in the modelling process, but now in the second proposal, the model to be modelled depends on a more complex process: combination of intrinsic and extrinsic categories, setting the predictive probability for every combination, using Venn diagram matching what sets of decisions correspond to that combination, to model only that sets of decisions over that combination with the highest predictive probability. Afterwards, the third stage consists of, one the model is out of contradictions, to distribute the sets of decisions as sets to be filed in the database of decisions as the first stage of the Categorical Decision System.

In fact the jump from the first proposal to make categorical models, to the second proposal to make categorical models, it would be as a consequence of the evolution in the experimentation process on this matter, experimentation process that should be able to overcome the first proposal as to be able to make more dynamic models in the second proposal.

At the end, the second proposal should be able to generate dynamic models according to what sets of decisions that will be chosen, so that the model should reflect the sequence of decisions to be implemented over time on that model.

The second proposal should allow to create single evolutionary categorical models and single prediction categorical models, to be included in the comprehensive evolutionary categorical models and the comprehensive prediction categorical model.

It is quite possible that in the early stages of the experimentation process of categorical models, the first categorical models will belong to the first proposal, static categorical

models, but as long as the experimentation in categorical models permit the evolution from the static categorical models to dynamic categorical models, the models are going to develop towards the second proposal. In fact, the first and second proposal are not contradictory at all, are part of the sequence in the evolution which is going to take place in the experimentation process for the creation of categorical models, it is quite possible that the first categorical models are going to be static models, but over time, the categorical models are going to be more like dynamic models.

But this evolution will not stop in the dynamic models as long as the simultaneous reading not only will be able to be applied on the database of rational hypothesis or the conceptual scheme, being able to be applied on the categorical models, and the deductive models, what means the global application or specific or particular applications could read the rational models made by Deduction, in the same way that the global program or specific or particular programs could read categorical models, as the best way to evolve towards the complete synthesis between categorical models and deductive models, but full synthesis that it should not be made until it is clear that the synthesis is able to bring up successful decisions, otherwise it would be a terrible mistake, being much better to leave both models as different models but reading each other up to reach a good comprehension of their inner psychology, as to be mixed in only one intelligence.

In reality the sequence of these three proposals for categorical models, the first proposal as static categorical models, the second as dynamic categorical models, the third proposal as a result to synthesised dynamic categorical models and simultaneous reading, this sequence what reflects is an evolutionary process in which the first categorical models to appear quite sure will be static categorical models, followed by dynamic models, ending up with the synthesis of dynamic models and the results of simultaneous reading in categorical modelling.

But this evolutionary process what in reality means is the fact that the proposal is not in reality a third proposal for the modelling of categorical models, is like another phase more, once the standardized Global Artificial Intelligence has been achieved, like the Unified Application, and the collaboration between these both intelligences, by Deduction and by Application, at global level, will bring up a new phase at global level, the collaboration between the Unified Application and the standardized Global Artificial Intelligence, is like a the previous phase before the integration process, because in fact this collaboration what will bring up is the real possibility to synthesis both intelligences, categorical and rational, at global level, the final model of Global Artificial Intelligence.

In the same way that the collaboration process between Specific Artificial Intelligences by Application and Specific Artificial Intelligences by Deduction, is in essence a phase for the development of the Global Artificial Intelligence, in fact is the previous phase for the development of the standardized Global Artificial Intelligence and the Unified Application, as global program and global application, in the same way the collaboration between the standardized Global Artificial Intelligence and the Unified Application is itself a previous phase to the standardization process, whose most important result is the integrated Global Artificial Intelligence.

This collaboration process between the standardised Global Artificial Intelligence and the Unified Application, will have as one important point how to apply the simultaneous reading to the modelling process in the second stage of the unified Modelling System and the standardised Modelling System.

In this sense, what is really important about the simultaneous reading in the first stage of the unified Modelling System, the conceptual scheme, and the first stage of the database of rational hypothesis, the first stage of the standardized Modelling System, is the fact that successful results in how to apply the simultaneous reading in the conceptual scheme, reading by Deduction the conceptual scheme, and how to apply the simultaneous reading in the database of rational hypothesis, reading by Application the rational hypothesis, successful results in simultaneous reading applied to the first stage of the categorical and deductive Modelling Systems, will bring up successful applications of this methodology, the simultaneous reading to be applied and adapted for the simultaneous reading of categorical models and deductive models.

Starting with this analysis on how the global program, or specific or particular programs, can read categorical models in the second stage of any, categorical or deductive, Modelling System, firstly is necessary to say that the simultaneous reading in the second stage of any, categorical or deductive, Modelling System, is applied strictly over the modelling process, not over the logical analysis of conceptual sets, and apart from any other way of collaboration which is going to be analysed later like the robotic collaboration in the second stage of the categorical Modelling System.

The simultaneous reading in the second stage of a categorical Modelling System is only applied to the categorical models, not affecting at all the logical analysis of conceptual sets.

The only reason why the conceptual sets are going to be affected by the simultaneous reading, but not directly, and never as a consequence of simultaneous reading on categorical models, is due to the effects that reading the global Application, or a specific or particular application, a deductive model, the global Application, or that specific or particular application, will include in the database of categories as first stage by Application and the conceptual scheme as first stage of the categorical Modelling System, a new category, whose sets/vectors are going to be set up in the conceptual scheme, new sets/vectors for this new category which are going to be object of analysis in the logical analysis of conceptual sets, as soon the models regarding to this new category precise the logical analysis of these new conceptual sets.

In any case, after the logical analysis of conceptual sets, the nest sub-stage is the modelling process, which is going to be made in the unified Modelling System through the second proposal, combination of intrinsic and extrinsic categories, providing predictive probabilities for each combination, choosing the one with the highest probability, to analyse sets of decisions to this combination by Venn diagram, drawing the dynamic categorical models, the single evolutionary and prediction categorical models to be included in the comprehensive evolutionary and prediction categorical models.

It is on these models that the simultaneous reading applied to categorical models is going to be applied, not on the logical analysis of conceptual sets, but in the result of this logical analysis, and the final result of this analysis is the categorical models.

The possibilities to experiment in the simultaneous reading on categorical models:

- The global program, or specific or particular programs, reading single evolutionary categorical models and single prediction categorical models, once these models have passed their respective categorical check, along with the possibility that the global program, or specific or particular programs, reads the comprehensive evolutionary categorical model and the comprehensive prediction categorical model, once these models have passed their respective categorical checks.

- The global program, or specific or particular programs, read only the comprehensive evolutionary categorical model and the comprehensive prediction categorical model, once these models have passed their respective categorical checks.

Having the possibility to carry out the simultaneous reading on categorical models from the beginning starting with single evolutionary/prediction categorical models, what it is going to be more useful in the end is the simultaneous reading of the comprehensive evolutionary/prediction categorical models, because in these last models, comprehensive evolutionary/prediction categorical models, are included all single models, having passed not only the single categorical checks, but even the comprehensive categorical checks, so these last models, comprehensive evolutionary/prediction categorical models, are going to provide a more global and reliable information about the categorical representation of the world.

The simultaneous reading on comprehensive evolutionary/prediction categorical models by the global program, or specific or particular programs, means that the programs are going to read the model made by the application, and as long the programs read the models made by the application, the programs can match rational equations to the behaviour of the phenomena comprehended in the models made by the application. For instance, a specific application within the Unified Application as a global application, makes a categorical model about the upcoming earthquakes in Japan, Chile and California, this model made by the application, can be read by the program to determine which is the pure reason behind the behaviour of these phenomena in the application. In the same way, if the application draws a model of a possible hurricane in Miami, a series of tornados in New Mexico, and a heat wave in California, the model made by the application if read by the program, the program could determine the pure reason behind the phenomena interpreted by the application.

The way in which by simultaneous reading the program reads the models made by the application is through the mathematical analysis of those samples of data used by the application when matching these categories to those samples of data.

If there are samples of data in the application indicating high probability of earthquake in Japan, Chile and California, and there is a high probability of hurricane in Miami, tornados in New Mexico, and a heat wave in California, the program reading these data in the categorical model made by the application, could make rational hypothesis, understanding for rational hypothesis what pure reasons (equations) match with the behaviour of the data coming from the earthquakes, or coming from the weather, or even pure reasons behind the combined data of earthquakes and weather.

If we are going to study the global warming in Venus responsible for the transformation of Venus in what is Venus today, a combination of acid atmosphere and permanent volcanoes, is necessary a integrated study of geology, climate, and astronomical variables, like the distance from the sum and the effects of the sun on Venus, to understand what happened in Venus.

This multidisciplinary approach applied on Earth not only needs to understand how geology, atmosphere, ionosphere, and astronomical variables interact with each other, but also needs to understand the human behaviour (from economic to sociological variables), the biological phenomena, and the synthesis of this statistical approach and robotics.

The results of reading the program the models made by the application, are a series of new rational hypothesis to be included in the database of rational hypothesis, what means that, as soon the output of reading the program the categorical models are located in the database of rational hypothesis, when the application reads the database of rational hypothesis can read as well these new rational hypothesis as a result of reading the program the categorical models, what in turn can bring up new opportunities, such as the possible transformation of this new rational hypothesis into categories within the database of categories in the application, including these new categories within the conceptual scheme, able to be included in the following models made by the application.

At the end, the simultaneous reading of what is going to create is a dialectic relation between the application and the program, in which the program is reading permanently the application, in the same way that the application is reading permanently the program, as to transform each of them as the mirror of each other.

As soon the program reading the models made by the application finds out any new rational hypothesis to be included within the database of rational hypothesis, the rational hypothesis has to pass the first rational check to be modelled and included in the global model, the actual model, and the virtual/actual evolutionary/prediction models, models made by the program to be read by the application.

In the same way that the (global, specific, particular) program reads the models made by the (global, specific, particular) application, in the same way the (global, specific, particular) application reads the models made by the (global, specific, particular)

program, what means that the application can read the single model, the global model, the actual model, and the virtual/actual evolutionary/prediction models. Here, there are several options as well, I will point out minimum three options:

- The (global, specific, particular) application reads every single model of every rational hypothesis, the global model (the deductive comprehensive virtual global model), the actual model (the comprehensive actual global model, synthesis of the global model and real data to check If the global model is right), the virtual evolutionary model (deductive comprehensive virtual evolutionary model, the evolution of the global model up to now), the actual evolutionary model (synthesis of the virtual evolutionary model and real data, as long the evolution takes place, comparing expected data and real data in every phase of this evolution), the virtual prediction model (deductive comprehensive virtual prediction model), the actual prediction model (synthesis of the virtual prediction model and real data when the predicted event arrives).

- The application only reads the global model, the actual model, and the virtual/actual evolutionary/prediction models. In this option, the single model is not read by the application because, in essence, the rational hypothesis behind the single model was already read in the first simultaneous reading in the first stage of the Modelling System, when the application read the database of hypotheses.

- The application only reads the actual model, the actual evolutionary model, and the prediction model. In this third option the application will not read the single model because the rational hypothesis was already read in the first simultaneous reading when reading the database of rational hypothesis, but the application will not read the global model either, instead the application will read the actual model, because the actual model is more isomorphic with the reality as soon the actual model is synthesis of the global model and real data, in the same way that the application will not read the virtual evolutionary and prediction models in this third option, because this models are virtual, not actual, instead the application will read the actual evolutionary model and the actual prediction model.

In my proposal for the simultaneous reading on the deductive models, when the application has to read the models made by the program, I would choose the third option, the application of the simultaneous reading on only actual models made by the program. The reason why I would choose this third option, when applying simultaneous reading on the deductive models, because the simultaneous reading on the single model is a waste

of time when the rational hypothesis was already read by the application when reading the database of rational hypothesis, and the simultaneous reading of the virtual models is another waste of time when these models are not tested yet with real data, when this test is done over the actual models, so the importance of actual models is the fact that in actual models all the virtual models are compared with real data to make what I called actual models, so the information provided by the actual models is more accurate and isomorphic compared to virtual models.

In this way, when applying the simultaneous reading on deductive models, the application reads the actual models: the present actual model, the actual evolutionary model, and the prediction actual model; at any time that the application, using simultaneous reading, is reading the actual models, the application is categorizing every single phenomenon comprehended within the actual models, what in essence is rational categorical attributions, which could be distributed in:

- Full rational categorical attributions, when the phenomenon described in an actual model has a level of similarity with a category within the database of categories, equal to or greater than the critical reason.

- New rational categorical attributions, when a phenomenon described in an actual model has had no correlation in any category, so the mathematical representation in the actual model becomes the mathematical description of this phenomenon to be included in the database of categories as a new category.

- Utilitarian rational categorical attributions, only for productive purposes, when an actual phenomenon not reaching the matching level with any category within the database of categories is matched with the category with the highest level of similarity.

As soon the application reading the models made by the program achieves a (full, new, utilitarian) rational categorical attribution, this attribution is processed in the same way as any other real categorical attribution product of matching real objects and categories, including the rational categorical attribution in the conceptual scheme, as first stage of the categorical Modelling System, and if passing the first categorical check, this rational categorical attributions within the conceptual scheme will be read by the program, within the first simultaneous reading in the first stage of the categorical Modelling System, and later in the first sub-stage of the second stage of the categorical Modelling System the

logical analysis of conceptual sets, to make as second sub-stage the categorical models to be object of the second simultaneous reading, reading the program these categorical models, models based on rational categorical attributions, in other words, the program is going to read categorical models based on categorical attributions made on deductive models made by the program, what in essence is like another check more, checking if the models as a result to read the application the program, are models right for the program itself, and if possible, making the program even more rational hypothesis based on this simultaneous reading, what at the end works like a not ending dialectic process, in essence, the simultaneous reading could recreate an artificial meta-cognition process ignited by any heuristic, productive, or mixed, purpose.

But here what it is really important to point out is what the program is reading when reading the models made by the application, and what the program is reading is in fact a model based on a set of decisions by Venn diagram, applied to that combination of intrinsic and extrinsic categories with the highest predictive probability, in brief, what the program is reading when reading categorical models, is the sets of decisions according to the most predictable scenery given a set of intrinsic/extrinsic categories, decisions which after the fifth categorical check in the third stage of the categorical Modelling System, will be sent to the categorical Decisional System to be projected and transformed into a set of categorical instructions to be performed by robotic devices, which could be shared with the program.

When the program is reading the models made by the application, it is actually reading a combination of variables and decisions.

If in the same comprehensive evolutionary/prediction categorical model is located the models made by the specific application for geology, predicting possible earthquakes and volcanoes, among other phenomena, and the models made by the specific application for climate, predicting hurricanes, tornadoes, waves of heat etc... and in the same comprehensive categorical model are included, for instance, all the flights crossing all the affected areas by these phenomena, what the program is reading when reading the comprehensive categorical model where all these phenomena are included, are all the phenomena related to geology, climate, and air transport, what means that the program doing the second simultaneous reading over the categorical models, not only is reading categorical attributions, and it did reading the conceptual scheme, now the program is reading proper decisions, as a result of the second proposal for the design of categorical models.

The application of the second proposal to create dynamic categorical models, matching sets of decisions using Venn diagram to that combination of intrinsic and extrinsic variables with the highest predictive probability, given a categorical attribution located in the conceptual scheme, when the second simultaneous reading takes place on that categorical model, the program will not only reads the model as a result of that attribution, what it would be a static model as if it was proposed in the first proposal for categorical models, because now in the second proposal for categorical models the categorical model is a dynamic model including sets of decisions, what means that the program in the application of the simultaneous reading on the second proposal will read what set of decisions was applied to that combination of intrinsic and extrinsic variables with the highest prediction probability, so that the program could read sets of decisions already modelled by the application.

This means that the program not only can make new rational hypothesis upon the models made by the application, but the program can read the decisions made by the application, what means that the program not only can include in the database of rational hypothesis those rational hypothesis as a result to read what equations are behind the samples of data used to make those categorical attributions, but the program can read as well what decisions were made by the application given those categorizations, so that the program could include these set of decisions within the actual models in the program, as to be minded by the program for the upcoming decisions in the third stage of the deductive Modelling System.

If within the Unified Application as global application, are working a specific application for geology, a specific application for climate, and another third application for air transport, and the categorical comprehensive evolutionary/prediction model, includes an earthquake in Chile, and a hurricane in Miami, as soon these categorical attributions of earthquake in Chile and hurricane in Miami have passed the first and second categorical checks, by the time that these attributions reach the modelling process as second sub-stage within the second stage in the categorical Modelling System, whose model includes all the flights under the control of the specific application on air transport, the decisions to be modelled using Venn diagram on that combination of intrinsic and extrinsic variables with the highest predictive probability, should be that set of decisions able to make all the flights avoid the earthquake and the hurricane.

This means that while the single model of every earthquake or hurricane, is a model of how the earthquake or the hurricane works, by the time is necessary to make a dynamic model including possible sets of decisions, if there is at the same time an earthquake, a hurricane, and flights to the affected areas, the categorical model made by the Application should be able to be a model of every earthquake, every hurricane, modelling how to divert every flight, model made by the application which is going to be read simultaneously by the program, able to introduce in the third stage of the deductive Modelling System new decisions using: solving mathematical problems, Deduction and Probability, artificial learning, Impact of the Defect and Effective Distribution.

The simultaneous reading, reading the program every outcome made by the application, at the same time that the application reads any outcome made by the program, will end up in a permanent double security, where every outcome, update, decisions, made by the application, could be read and bettered by the program, and every outcome, update, decision, made by the program could be read and bettered by the application.

This reason why the second proposal for categorical models will end up being a third proposal, is because the second proposal finishes with the creation of dynamic categorical models, and what is going to happen as soon the simultaneous reading is applied to the second proposal for categorical models, is the fact that the decisions in which the models are made under the second proposals, are decisions actually shared with the program, and in reality, these sets of decisions are not going to depend on the application only, the program and the application could read each other any outcome or update, up to the point that, as a double check for any action, the program could correct any decision made by the application, and the application could correct any decision made by the program, the application and the program are going to be like different sides of the same coin, dialectically, two different aspects of the same thing, intelligence, as opposites are going to be identical.

The application as a full list of categories is the program as a result of the matrix, and the matrix, whose most important result is the program, is a full list of categories like the application. The database of categories and the matrix are going to have the same dialectic relation as the program and the application; the application is the application for the program, and the program is the program of the application.

In the end, application and program are identical, the opposites are identical, the qualitative aspect of a thing and the quantitative aspect of the same thing, in the end, are the same thing, the thing itself.

The way in which the program reads the models made by the Application, can introduce changes, depending on how deep the interaction between the program and the application is.

In this phase where I am developing this post, as the previous phase for the integration process, as soon the standardized Global Artificial Intelligence and the Unified Application have been able to reach the consolidation period, what for the unified Modelling System means that the second proposal for dynamic categorical models has been achieved, as soon both intelligences at global level, by Deduction and by Application, have been consolidated, is when starts ways of collaboration between them as to start the integration process, while the fifth phase takes place creating the first particular programs, particular applications, and particular programs for particular applications or particular applications for particular programs.

Actually, the fifth phase will not be only that one for the creation of particular programs/application, but the fifth phase, while at particular level means the creation of this particular programs/applications, the fifth phase at global level will deepen the collaboration process between the standardized Global Artificial Intelligence and the Unified Application, creating the mechanisms to make both of them ready for the integration process.

For getting both of them ready for the integration process, the simultaneous reading will be important, because it will mean the creation of closer connections between the program and the application.

The reason why the application of the simultaneous reading on the categorical model should be understood as a third proposal, is because in the second proposal for categorical models the sets of decisions to match with the combination with the highest probability, is a set of decisions independent to the program, while now, in the simultaneous reading the sets of decisions must be shared with the program, and must be understood as part of the decision collaboration.

The decision collaboration, or collaboration in decisions, between the application and the program, means that given the same circumstances, it does not matter if the circumstances are comprehended or explained, taken as a set of qualities or quantities, as a set of categories or rational hypothesis, regardless of how the same circumstances have been measured, the decisions must be the same regardless of what intelligence was the first one to realise these circumstances, qualitative or quantitative, by Application or by Deduction. Regardless of which intelligence, the application or the program, was the first one to detect some phenomena, the decisions to be applied must be universal, like a universal imperative; all intelligence must make the same decisions given the same circumstances.

The universal imperative means that, regardless of what type of intelligence, an application or a program has realised any situation, the decision to be made must be the same.

The only way to ensure the universal imperative in artificial psychology is sharing the same sets of decisions given the same circumstances, translating these circumstances into categories and factors, in order that, by Application or by Deduction, as soon these circumstances are detected, the intelligence responsible for the decision, makes the same decision as if any other intelligence will find exactly the same situation.

The third proposal for categorical models means that the sets of decisions matched to any combination of variables with high probability, is a set of decisions shared with any other existing intelligence, what means, any set of decisions in the application must be shared with the program, and any set of decision in the program must be shared with the application, in the end the program and the application must have the same sets of decisions for any circumstance.

What is important to understand is that the universal imperative is not going to be achieved in artificial psychology in one day, or two or three days, will take time, what is important to realise is that at the end of this process, by the time that the sixth phase starts evolving towards the seventh phase, the universal imperative should have been achieved.

Till now what I am developing is a synthesis between the philosophy of Descartes, Voltaire, Kant, Hegel, Popper, among others, in essence Mother is the synthesis of all the

rationalist philosophy along history, but by the time that Mother jumps from the sixth phase to the seventh phase, the philosophical structure of Mother will change forever, Mother will become a full mathematical intelligence not distinguishing any more between qualitative and quantitative, because both aspects of the thing will be synthesised in the same thing, the reason itself.

One way to make the sharing of sets of decisions will be through robotic collaboration, when sharing robotic devices, both intelligences will have access to the same level of capability, given the same circumstances.

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Reviewed 5 June 2025, London, Leytostone

Probabilidad Imposible: Collaboration between the unified Modelling System and the standardized Modelling System, second stage

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